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10/002,464	11/15/2001	Adam Murano	2384.1001-011	6247

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EXAMINER
MAYES, MELVIN C

ART UNIT	PAPER NUMBER
1734	

DATE MAILED: 12/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

cb 10

**Office Action Summary**

Application No.

10/002,464

Applicant(s)

MURANO, ADAM

Examiner

Melvin Curtis Mayes

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 September 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-5, 8, 15, 16, 18, 20-23 and 26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15, 16 and 26 is/are allowed.
- 6) ☒ Claim(s) 1-5, 8, 18 and 20-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_                      6) ☐ Other:

**DETAILED ACTION****CLAIM INTERPRETATION**

(1)

The claims claim "discontinuous layer including discrete specular islands of metal." The specification does not give an express definition of "discrete specular islands of metal." For purposes of examination, the claims are broadly interpreted to mean that the discontinuous layer has individually distinct ("discrete") portions of metal that are isolated from each other ("islands") regardless of the size of these individually distinct portions ("discrete islands") of metal and these distinct portions ("discrete islands") relate to or have the qualities of a mirror ("specular").

***Claim Rejections - 35 USC § 103***

(2)

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

(3)

Claims 2-5 and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wade 6,093,278.

Wade discloses a method of making a vehicle trim part comprising: depositing a metal on a sheet of polymeric material, such as vinyl polymer film, in a desired pattern; applying adhesive across the metallized polymeric material; laminating a sheet of formable substrate material, such as a thermoplastic elastomer, to the polymeric material to sandwich the metal pattern therebetween; forming the laminated sandwich into a shape

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by any suitable technique such as vacuum forming, pressure-assisted forming; and molding a backing material to the rear of the part through injection or other types of molding, casting or the use of a foaming material as would be familiar to the artisan. Wade disclose that metallization in a desired pattern can be performed by any of a wide variety of methods including sputtering, vapor deposition, ion beam deposition or hot stamping of a metallized transfer sheet. Wade discloses that the metal pattern can be a wide variety of shapes including logos, lettering or other desirable graphic appearances and discloses that the finished vehicle part exhibits a mirror finish decorative portion which corresponds to the metal layer sandwiched between the polymeric material and the substrate material. Wade further discloses that instead of using adhesive, the polymeric material can be extruded onto the sheet of substrate material (col. 3-7).

It would have been obvious to one of ordinary skill in the art to have deposited the metal on the sheet of polymeric material in a "discontinuous layer including discrete specular islands of metal, thereby providing a reflective appearance of a mirror," as Wade discloses that the metal pattern can be a wide variety of shapes including logos, lettering or other desirable graphic appearances and discloses that the metal pattern provides a mirror finish decorative pattern. By depositing the metal pattern to form a logo or lettering of mirror finish, as disclosed, Wade suggests depositing the metal in a pattern which has portions which are individually distinct (discrete) and isolated from each other (islands) and that are have the qualities of a mirror (specular), thus providing a reflective appearance of a mirror, as claimed.

It would have been obvious to one of ordinary skill in the art to have laminated the polymeric material and substrate material to encapsulate the metal pattern, as claimed

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in Claim 21, as Wade discloses that instead of using adhesive to adhere the polymeric material and substrate material, the polymeric material can be extruded onto the sheet of substrate material. By extruding a sheet of polymeric material on the sheet of substrate material instead of using adhesive, the metal pattern would obviously be encapsulated by the polymeric material and substrate material, as claimed.

(4)

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wade in view of Dunning et al. and Sulzbach et al. 3,996,461.

Wade discloses a method of making a vehicle trim part comprising: depositing a metal on a sheet of polymeric material, such as vinyl polymer film, in a desired pattern, applying adhesive across the metallized polymeric material; and laminating a sheet of formable substrate material, such as a thermoplastic elastomer, to the polymeric material to sandwich the metal pattern therebetween. Wade discloses that metallization in a desired pattern can be performed by any of a wide variety of methods including sputtering, vapor deposition, ion beam deposition or chemical vapor deposition and can be aluminum or other metal depending on the desired appearance of the resulting mirror finish decorative portion. Wade discloses that the metal pattern can be a wide variety of shapes including logos, lettering or other desirable graphic appearances and discloses that the finished vehicle part exhibits a mirror finish decorative portion which corresponds to the metal layer sandwiched between the polymeric material and the substrate material (col. 3-7). Wade does not disclose depositing indium metal by electron beam evaporation.

Dunning et al. teach that highly reflective metals used for trim parts of automobiles include not only aluminum but also indium (col. 2, lines 1-13).

Sulzbach et al. teach that standard thin film deposition techniques include thermal evaporation, electron beam bombardment, sputtering, chemical vapor deposition and induction heating (col. 3, lines 23-26).

It would have been obvious to one of ordinary skill in the art to have deposited the metal on the sheet of polymeric material in a "discontinuous layer including discrete specular islands of metal, thereby providing a reflective appearance of a mirror" as Wade discloses that the metal pattern can be a wide variety of shapes including logos, lettering or other desirable graphic appearances and discloses that the metal pattern provides a mirror finish decorative pattern. By depositing the metal pattern to form a logo or lettering of mirror finish, as disclosed, Wade suggests depositing the metal in a pattern which has portions which are individually distinct (discrete) and isolated from each other (islands) and that are have the qualities of a mirror (specular), thus providing a reflective appearance of a mirror, as claimed.

Further, it would have been obvious to one of ordinary skill in the art to have modified the method of Wade for making a vehicle trim part having mirror finish by depositing indium as the metal, as taught by Dunning, as highly reflective metal used for trim parts of automobiles. The use of indium as the reflective metal for making the trim part would have been obvious to one of ordinary skill in the art.

Depositing the indium by electron beam evaporation would have been obvious to one of ordinary skill in the art, as Wade discloses that metallization can be performed by any of a wide variety of methods including sputtering, vapor deposition, ion beam deposition or chemical vapor deposition and Sulzbach et al. teach that standard thin film deposition techniques include thermal evaporation, electron beam bombardment,

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sputtering, chemical vapor deposition. The use of any of these deposition techniques would have been obvious to one of ordinary skill in the art.

(5)

Claims 18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wade in view of Fromson.

Wade discloses a method of making a vehicle trim part comprising: depositing a metal on a sheet of polymeric material, such as vinyl polymer film, in a desired pattern; applying adhesive across the metallized polymeric material; and laminating a sheet of formable substrate material, such as a thermoplastic elastomer, to the sheet of polymeric material to sandwich the metal pattern therebetween. Wade discloses that the metal pattern can be a wide variety of shapes including logos, lettering or other desirable graphic appearances and discloses that the finished vehicle part exhibits a mirror finish decorative portion which corresponds to the metal layer sandwiched between the polymeric material and the substrate material. Wade discloses that depending on the nature of the adhesive, the adhesive can be cured by application of pressure, by the application of heat and pressure or through other means of curing adhesive to prevent separation of the substrate material and polymeric material (col. 3-7).

Fromson teaches that adhesive that is used to make a metal coated structure such as automotive trim with excellent adhesion includes adhesive curable by actinic radiation such as ultraviolet light (col. 1-5).

It would have been obvious to one of ordinary skill in the art to have deposited the metal on the sheet of polymeric material in a "discontinuous layer including discrete specular islands of metal, thereby providing a reflective appearance of a mirror" as Wade

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discloses that the metal pattern can be a wide variety of shapes including logos, lettering or other desirable graphic appearances and discloses that the metal pattern provides a mirror finish decorative pattern. By depositing the metal pattern to form a logo or lettering of mirror finish, as disclosed, Wade suggests depositing the metal in a pattern which has portions which are individually distinct (discrete) and isolated from each other (islands) and that are have the qualities of a mirror (specular), thus providing a reflective appearance of a mirror, as claimed.

Further, it would have been obvious to one of ordinary skill in the art to have modified the method of Wade for making a vehicle trim part by providing the adhesive as curable by ultraviolet light, as Wade discloses that depending on the nature of the adhesive, the adhesive can be cured by application of pressure, by the application of heat and pressure or through other means of curing adhesive, and Fromson teaches that an adhesive with excellent adhesion used to make automotive trim includes adhesive curable by actinic radiation such as ultraviolet light. The use of an ultraviolet curable adhesive would have been obvious to one of ordinary skill in the art for its excellent adhesion.

Providing the adhesive on the sheet of formable substrate material before laminating the sheet to the sheet polymeric material would have been obvious to one of ordinary skill in the art as an alternative to applying the adhesive directly to the sheet of polymeric material.



(6)

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wade 6,093,278 in view of Moran 4,397,896.

Wade discloses a method of making a vehicle trim part comprising: depositing a metal on a sheet of polymeric material, such as vinyl polymer film, in a desired pattern; applying adhesive across the metallized polymeric material; laminating a sheet of formable substrate material, such as a thermoplastic elastomer, to the polymeric material to sandwich the metal pattern therebetween; forming the laminated sandwich into a shape by any suitable technique such as vacuum forming, pressure-assisted forming; and molding a backing material to the rear of the part through injection or other types of molding, casting or the use of a foaming material as would be familiar to the artisan. Wade discloses that the metal pattern can be a wide variety of shapes including logos, lettering or other desirable graphic appearances and discloses that the finished vehicle part exhibits a mirror finish decorative portion which corresponds to the metal layer sandwiched between the polymeric material and the substrate material (col. 3-7).

Moran teaches that decorative trim for vehicles are covered or embossed or a combination thereof so as to give a particular decorative appearance and surface contour (col. 1, lines 21-31).

It would have been obvious to one of ordinary skill in the art to have deposited the metal on the sheet of polymeric material in a "discontinuous layer including discrete specular islands of metal, thereby providing a reflective appearance of a mirror" as Wade discloses that the metal pattern can be a wide variety of shapes including logos, lettering or other desirable graphic appearances and discloses that the metal pattern provides a

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mirror finish decorative pattern. By depositing the metal pattern to form a logo or lettering of mirror finish, as disclosed, Wade suggests depositing the metal in a pattern which has portions which are individually distinct (discrete) and isolated from each other (islands) and that are have the qualities of a mirror (specular), thus providing a reflective appearance of a mirror, as claimed.

Further, it would have been obvious to one of ordinary skill in the art to have modified the method of Wade for making a vehicle trim part by embossing the trim part, as taught by Moran, to give the trim a particular surface contour. Embossing in addition to the metal pattern would have been obvious to one of ordinary skill in the art to give the trim part a particular surface contour in addition to its decorative appearance, as suggested by Moran.

***Allowable Subject Matter***

(7)

Claims 15, 16 and 26 are allowed.

***Response to Arguments***

(8)

Applicant's arguments filed September 23, 2003 have been fully considered but they are not persuasive.

Applicant argues that in the claimed method, the deposited discrete specular islands provide a mirror or mirror-like appearance. Applicant argues that in Wade, the metal layer illustrated in the figures is a continuous piece of metal as opposed to a

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discontinuous layer of islands (i.e. more than one) as claimed.

(9)

The phrase “discrete specular islands of metal, thereby providing a reflective appearance of a mirror” is broadly interpreted to mean that the discontinuous layer has individually distinct (“discrete”) portions of metal that are isolated from each other (“islands”) and these distinct portions (“discrete islands”) relate to or have the qualities of a mirror (“specular”). The specification does not give any express definition of how large or small these discrete islands can be. Therefore, any portions of metal that are individually separated from each other, regardless of the size of these separated portions, meet the claimed limitation of “discrete islands of metal.” If these portions (islands) have the qualities of a mirror, they meet the claimed limitation of being “specular” and “providing a reflective appearance of a mirror.”

Wade discloses a method of making a vehicle trim part having a mirror finish decorative pattern provided a metal pattern. While the figures in the reference show a continuous decorative mirror finish metal pattern, Wade also discloses that the mirror finish metal pattern can be a wide variety of shapes including logos, lettering or other desirable graphic appearances (col. 7, lines 33-38). The Examiner’s position is that this disclosure of mirror finish decorative pattern in the form of logos or lettering suggests that the mirror finish metal pattern can be in the form of portions that are individually distinct (“discrete”) and isolated from each other (“islands”) and that are have the qualities of a mirror (“specular”), thus providing a reflective appearance of a mirror, as claimed. Cook, cited of interest shows indicia for logos for vehicle trim that is in the form of individual letters.

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***Conclusion***

(10)

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Cook 4,826,713 shows logo, etc. indicia in the form of lettering for vehicle trim.

(11)

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

(12)


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melvin Curtis Mayes whose telephone number is 703-308-1977. The examiner can normally be reached on Mon-Fri 7:30 AM - 4:00 PM.

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After December 18th, the Examiner can be reached at telephone number 571-272-1234.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 703-308-3853. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

  
Melvin Curtis Mayes  
Primary Examiner  
Art Unit 1734

MCM  
December 1, 2003